



POLITECNICO
MILANO 1863

Process Management

A.Y. 2017-18

ACSO Tutoring

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Exercise 2 (Thread & Parallelism)

19/09/2010

Condition	<i>loc</i> in T1	<i>loc</i> in T2
After stat. A	<i>EXISTS</i>	<i>CAN EXIST</i>
After stat. C	<i>CAN EXIST</i>	<i>EXISTS</i>
After stat. E	<i>CAN EXIST</i>	<i>DOESN'T EXIST</i>

Condition	<i>pass</i> {0,1,2,3}	<i>glob</i> {2,3}
After stat. A	0 / 1	2 / 3
After stat. B	1 / 2	2 / 3
After stat. C	0 / 1 / 2	2
After stat. D	0 / 1	3
After stat. E	0	3

Exercise 2 (Thread & Parallelism)

19/09/2010

Situation	T1	T2
1	<i>Terminated</i>	<i>2° sem_wait</i>
2	<i>pthread_mutex_lock</i>	<i>2° sem_wait</i>

Exercise 4 (Process State)

22/09/2016

Task name		IDLE	S	P	TH1	Q	TH2
	PID	1	2	3	4	5	6
	TGID	1	2	3	2	5	2
S – sem_init	0	READY	EXEC	READY			
S – pthread_create	10	READY	EXEC	READY	READY		
Interrupt from RT_clock	20	READY	READY	EXEC	READY		
P - fork	30	READY	READY	EXEC	READY	READY	
P - write	40	READY	READY	WAIT (write)	EXEC	READY	
TH – sem_wait	50	READY	EXEC	WAIT (write)	WAIT (sem)	READY	
25 interrupts from standard input, only 25 chars data have been read	60	READY	EXEC	WAIT (write)	WAIT (sem)	READY	
S – pthread_create	70	READY	EXEC	WAIT (write)	WAIT (sem)	READY	READY
S – join(TH2)	80	READY	WAIT (join)	WAIT (write)	WAIT (sem)	EXEC	READY
Q - execl	90	READY	WAIT (join)	WAIT (write)	WAIT (sem)	EXEC	READY
Q - exit	100	READY	WAIT (join)	WAIT (write)	WAIT (sem)	NOT EXISTS	EXEC